

	A	B	C	D	E
1	UPLINK EIRP DENSITY FOR 96 CM	ANTENNA			
2					
3	INPUTS				
4	frequency, MHz	14250			
5	antenna diameter, m	0.96			
6	antenna efficiency (fraction < 1)	0.64149			
7	peak input power to antenna, W	4			
8	bandwidth, MHz	2			
9					
10	FCC allowed input power density				
11	to antenna, dBW/4kHz	-14			
12					
13	OUTPUTS				
14	wavelength, m	0.021038596			
15	peak gain of circular ant., dBi	41.19998574			
16	input pwr. density to ant., dBW/4kHz	-20.96910013			
17					
18			(Ku- ant., >= 1.2 m dia.)		
19	off-axis angle, deg	antenna gain, dBi	FCC antenna gain envel.	EIRP density	FCC allowed EIRP density,
20			envelope, dBi	dBW/4kHz	dBW/4kHz
21	0	41.19998574	41.19998574	20.23088561	27.19998574
22	0.05				
23	0.1				
24	0.15				
25	0.2				
26	0.25				
27	0.3				
28	0.35				
29	0.4				
30	0.45				
31	0.5				
32	0.55				
33	0.6				
34	0.65				
35	0.7				
36	0.75	38.19998574		17.23088561	

	A	B	C	D	E
37	0.8				
38	0.85				
39	0.9				
40	0.95				
41	1				
42	1.05				
43	1.1				
44	1.15				
45	1.2				
46	1.25	33.69998574	26.57724967	12.73088561	12.57724967
47	1.3	33.19998574	26.15141619	12.23088561	12.15141619
48	1.35	32.69998574	25.74165579	11.73088561	11.74165579
49	1.375	32.19998574	25.54243255	11.23088561	11.54243255
50	1.4		25.34679911		11.34679911
51	1.45		24.96579994		10.96579994
52	1.5	30.19998574	24.59771852	9.230885608	10.59771852
53	1.55		24.24170755		10.24170755
54	1.6		23.89700043		9.897000434
55	1.625	27.69998574	23.72866587	6.730885608	9.728665867
56	1.65		23.56290139		9.562901395
57	1.7		23.23877697		9.238776966
58	1.75	25.19998574	22.92404878	4.230885608	8.924048783
59	1.8	22.61818737	22.61818737	1.649087242	8.618187372
60	1.85	22.32070679	22.32070679	1.35160666	8.32070679
61	1.9	22.03115998	22.03115998	1.062059846	8.031159976
62	1.95	21.74913472	21.74913472	0.780034586	7.749134716
63	2	21.47425011	21.47425011	0.505149978	7.474250108
64	2.1	20.94451763	20.94451763	-0.024582498	6.944517632
65	2.2	20.43943298	20.43943298	-0.529667151	6.439432979
66	2.3	19.9568041	19.9568041	-1.012296031	5.9568041
67	2.4	19.49471896	19.49471896	-1.474381173	5.494718957
68	2.5	19.05149978	19.05149978	-1.917600347	5.051499783
69	2.6	18.6256663	18.6256663	-2.343433829	4.625666301
70	2.7	18.2159059	18.2159059	-2.753194234	4.215905896
71	2.8	17.82104922	17.82104922	-3.148050914	3.821049216
72	2.9	17.44005005	17.44005005	-3.529050078	3.440050053

	A	B	C	D	E
73	3	17.07196863	17.07196863	-3.897131498	3.071968632
74	3.1	16.71595765	16.71595765	-4.253142476	2.715957654
75	3.2	16.37125054	16.37125054	-4.597849588	2.371250542
76	3.3	16.0371515	16.0371515	-4.931948627	2.037151503
77	3.4	15.71302707	15.71302707	-5.256073056	1.713027074
78	3.5	15.39829889	15.39829889	-5.570801239	1.398298891
79	3.6	15.09243748	15.09243748	-5.876662649	1.092437481
80	3.7	14.7949569	14.7949569	-6.174143232	0.794956898
81	3.8	14.50541008	14.50541008	-6.463690046	0.505410085
82	3.9	14.22338482	14.22338482	-6.745715306	0.223384824
83	4	13.94850022	13.94850022	-7.020599913	-0.051499783
84	4.1	13.68040358	13.68040358	-7.288696548	-0.319596418
85	4.2	13.41876774	13.41876774	-7.55033239	-0.58123226
86	4.3	13.16328861	13.16328861	-7.80581152	-0.836711389
87	4.4	12.91368309	12.91368309	-8.055417042	-1.086316912
88	4.5	12.66968716	12.66968716	-8.299412974	-1.330312844
89	4.6	12.43105421	12.43105421	-8.538045922	-1.568945792
90	4.7	12.19755355	12.19755355	-8.771546578	-1.802446448
91	4.8	11.96896907	11.96896907	-9.000131064	-2.031030934
92	4.9	11.745098	11.745098	-9.224002131	-2.254902001
93	5	11.52574989	11.52574989	-9.443350238	-2.474250108
94	5.1	11.3107456	11.3107456	-9.658354533	-2.689254402
95	5.2	11.09991641	11.09991641	-9.869183721	-2.900083591
96	5.3	10.89310326	10.89310326	-10.07599687	-3.10689674
97	5.4	10.690156	10.690156	-10.27894413	-3.309843996
98	5.5	10.49093276	10.49093276	-10.47816737	-3.509067237
99	5.6	10.29529932	10.29529932	-10.67380081	-3.704700675
100	5.7	10.10312861	10.10312861	-10.86597152	-3.896871392
101	5.8	9.914300161	9.914300161	-11.05479997	-4.085699839
102	5.9	9.728699709	9.728699709	-11.24040042	-4.271300291
103	6	9.54621874	9.54621874	-11.42288139	-4.45378126
104	6.1	9.366754125	9.366754125	-11.60234601	-4.633245875
105	6.2	9.190207763	9.190207763	-11.77889237	-4.809792237
106	6.3	9.016486264	9.016486264	-11.95261387	-4.983513736
107	6.4	8.84550065	8.84550065	-12.12359948	-5.15449935
108	6.5	8.677166084	8.677166084	-12.29193405	-5.322833916

	A	B	C	D	E
109	6.6	8.511401611	8.511401611	-12.45769852	-5.488598389
110	6.7	8.348129932	8.348129932	-12.6209702	-5.651870068
111	6.8	8.187277182	8.187277182	-12.78182295	-5.812722818
112	6.9	8.028772732	8.028772732	-12.9403274	-5.971227268
113	7	7.872549	8	-13.09655113	-6
114	7.1	7.718541282	8	-13.25055885	-6
115	7.2	7.566687589	8	-13.40241254	-6
116	7.3	7.416928497	8	-13.55217163	-6
117	7.4	7.269207007	8	-13.69989312	-6
118	7.5	7.123468415	8	-13.84563171	-6
119	7.6	6.979660193	8	-13.98943994	-6
120	7.7	6.837731871	8	-14.13136826	-6
121	7.8	6.697634933	8	-14.2714652	-6
122	7.9	6.559322718	8	-14.40977741	-6
123	8	6.422750325	8	-14.5463498	-6
124	8.1	6.287874528	8	-14.6812256	-6
125	8.2	6.15465369	8	-14.81444644	-6
126	8.3	6.023047691	8	-14.94605244	-6
127	8.4	5.893017848	8	-15.07608228	-6
128	8.5	5.764526857	8	-15.20457327	-6
129	8.6	5.637538719	8	-15.33156141	-6
130	8.7	5.512018685	8	-15.45708145	-6
131	8.8	5.387933196	8	-15.58116693	-6
132	8.9	5.265249834	8	-15.7038503	-6
133	9	5.143937264	8	-15.82516287	-6
134	9.1	5.023965192	8	-15.94513494	-6
135	9.2	4.905304316	8	-16.06379581	-6
136	9.3	4.787926286	7.787926286	-16.18117384	-6.212073714
137	9.4	4.67180366	7.67180366	-16.29729647	-6.32819634
138	9.5	4.556909868	7.556909868	-16.41219026	-6.443090132
139	9.6	4.443219174	7.443219174	-16.52588096	-6.556780826
140	9.7	4.330706643	7.330706643	-16.63839349	-6.669293357
141	9.8	4.219348108	7.219348108	-16.74975202	-6.780651892
142	9.9	4.109120135	7.109120135	-16.85998	-6.890879865
143	10	4	7	-16.96910013	-7
144	11	2.965182871	5.965182871	-18.00391726	-8.034817129

	A	B	C	D	E
145	12	2.020468849	5.020468849	-18.94863128	-8.979531151
146	13	1.151416192	4.151416192	-19.81768394	-9.848583808
147	14	0.346799108	3.346799108	-20.62230102	-10.65320089
148	15	-0.402281476	2.597718524	-21.37138161	-11.40228148
149	16	-1.102999566	1.897000434	-22.0720997	-12.10299957
150	17	-1.761223034	1.238776966	-22.73032316	-12.76122303
151	18	-2.381812628	0.618187372	-23.35091276	-13.38181263
152	19	-2.968840024	0.031159976	-23.93794015	-13.96884002
153	20	-3.525749892	-0.525749892	-24.49485002	-14.52574989
154	21	-3.5	-1.055482368	-24.46910013	-15.05548237
155	22	-3.5	-1.560567021	-24.46910013	-15.56056702
156	23	-3.5	-2.0431959	-24.46910013	-16.0431959
157	24	-3.5	-2.505281043	-24.46910013	-16.50528104
158	25	-3.5	-2.948500217	-24.46910013	-16.94850022
159	26	-3.5	-3.374333699	-24.46910013	-17.37433337
160	26.1	-3.5	-3.416012683	-24.46910013	-17.41601268
161	26.2	-3.5	-3.457532283	-24.46910013	-17.45753228
162	26.3	-3.5	-3.498893712	-24.46910013	-17.49889371
163	26.4	-3.540098172	-3.540098172	-24.5091983	-17.54009817
164	26.5	-3.581146848	-3.581146848	-24.55024698	-17.58114685
165	26.6	-3.622040916	-3.622040916	-24.59114105	-17.62204092
166	26.7	-3.662781534	-3.662781534	-24.63188166	-17.66278153
167	26.8	-3.703369851	-3.703369851	-24.67246998	-17.70336985
168	26.9	-3.743807	-3.743807	-24.71290713	-17.743807
169	27	-3.784094104	-3.784094104	-24.75319423	-17.7840941
170	28	-4.178950784	-4.178950784	-25.14805091	-18.17895078
171	29	-4.559949947	-4.559949947	-25.52905008	-18.55994995
172	30	-4.928031368	-4.928031368	-25.8971315	-18.92803137
173	31	-5.284042346	-5.284042346	-26.25314248	-19.28404235
174	32	-5.628749458	-5.628749458	-26.59784959	-19.62874946
175	33	-5.962848497	-5.962848497	-26.93194863	-19.9628485
176	34	-6.286972926	-6.286972926	-27.25607306	-20.28697293
177	35	-6.601701109	-6.601701109	-27.57080124	-20.60170111
178	36	-6.907562519	-6.907562519	-27.87666265	-20.90756252
179	37	-7.205043102	-7.205043102	-28.17414323	-21.2050431
180	38	-7.494589915	-7.494589915	-28.46369005	-21.49458992

	A	B	C	D	E
181	39	-7.776615176	-7.776615176	-28.74571531	-21.77661518
182	40	-8.051499783	-8.051499783	-29.02059991	-22.05149978
183	41	-8.319596418	-8.319596418	-29.28869655	-22.31959642
184	42	-8.58123226	-8.58123226	-29.55033239	-22.58123226
185	43	-8.836711389	-8.836711389	-29.80581152	-22.83671139
186	44	-9.086316912	-9.086316912	-30.05541704	-23.08631691
187	45	-9.330312844	-9.330312844	-30.29941297	-23.33031284
188	46	-9.568945792	-9.568945792	-30.53804592	-23.56894579
189	47	-9.802446448	-9.802446448	-30.77154658	-23.80244645
190	48	-10.03103093	-10.03103093	-31.00013106	-24.03103093
191	49	-10	-10	-30.96910013	-24
192	50	-10	-10	-30.96910013	-24
193	51	-10	-10	-30.96910013	-24
194	52	-10	-10	-30.96910013	-24
195	53	-10	-10	-30.96910013	-24
196	54	-10	-10	-30.96910013	-24
197	55	-10	-10	-30.96910013	-24
198	56	-10	-10	-30.96910013	-24
199	57	-10	-10	-30.96910013	-24
200	58	-10	-10	-30.96910013	-24
201	59	-10	-10	-30.96910013	-24
202	60	-10	-10	-30.96910013	-24
203	61	-10	-10	-30.96910013	-24
204	62	-10	-10	-30.96910013	-24
205	63	-10	-10	-30.96910013	-24
206	64	-10	-10	-30.96910013	-24
207	65	-10	-10	-30.96910013	-24
208	66	-10	-10	-30.96910013	-24
209	67	-10	-10	-30.96910013	-24
210	68	-10	-10	-30.96910013	-24
211	69	-10	-10	-30.96910013	-24
212	70	-10	-10	-30.96910013	-24
213	71	-10	-10	-30.96910013	-24
214	72	-10	-10	-30.96910013	-24
215	73	-10	-10	-30.96910013	-24
216	74	-10	-10	-30.96910013	-24

	A	B	C	D	E
217	75	-10	-10	-30.96910013	-24
218	76	-10	-10	-30.96910013	-24
219	77	-10	-10	-30.96910013	-24
220	78	-10	-10	-30.96910013	-24
221	79	-10	-10	-30.96910013	-24
222	80	-10	-10	-30.96910013	-24
223	81	-10	-10	-30.96910013	-24
224	82	-10	-10	-30.96910013	-24
225	83	-10	-10	-30.96910013	-24
226	84	-10	-10	-30.96910013	-24
227	85	-10	-10	-30.96910013	-24
228	86	-10	-10	-30.96910013	-24
229	87	-10	-10	-30.96910013	-24
230	88	-10	-10	-30.96910013	-24
231	89	-10	-10	-30.96910013	-24
232	90	-10	-10	-30.96910013	-24
233	91	-10	-10	-30.96910013	-24
234	92	-10	-10	-30.96910013	-24
235	93	-10	-10	-30.96910013	-24
236	94	-10	-10	-30.96910013	-24
237	95	-10	-10	-30.96910013	-24
238	96	-10	-10	-30.96910013	-24
239	97	-10	-10	-30.96910013	-24
240	98	-10	-10	-30.96910013	-24
241	99	-10	-10	-30.96910013	-24
242	100	-10	-10	-30.96910013	-24
243	101	-10	-10	-30.96910013	-24
244	102	-10	-10	-30.96910013	-24
245	103	-10	-10	-30.96910013	-24
246	104	-10	-10	-30.96910013	-24
247	105	-10	-10	-30.96910013	-24
248	106	-10	-10	-30.96910013	-24
249	107	-10	-10	-30.96910013	-24
250	108	-10	-10	-30.96910013	-24
251	109	-10	-10	-30.96910013	-24
252	110	-10	-10	-30.96910013	-24

	A	B	C	D	E
253	111	-10	-10	-30.96910013	-24
254	112	-10	-10	-30.96910013	-24
255	113	-10	-10	-30.96910013	-24
256	114	-10	-10	-30.96910013	-24
257	115	-10	-10	-30.96910013	-24
258	116	-10	-10	-30.96910013	-24
259	117	-10	-10	-30.96910013	-24
260	118	-10	-10	-30.96910013	-24
261	119	-10	-10	-30.96910013	-24
262	120	-10	-10	-30.96910013	-24
263	121	-10	-10	-30.96910013	-24
264	122	-10	-10	-30.96910013	-24
265	123	-10	-10	-30.96910013	-24
266	124	-10	-10	-30.96910013	-24
267	125	-10	-10	-30.96910013	-24
268	126	-10	-10	-30.96910013	-24
269	127	-10	-10	-30.96910013	-24
270	128	-10	-10	-30.96910013	-24
271	129	-10	-10	-30.96910013	-24
272	130	-10	-10	-30.96910013	-24
273	131	-10	-10	-30.96910013	-24
274	132	-10	-10	-30.96910013	-24
275	133	-10	-10	-30.96910013	-24
276	134	-10	-10	-30.96910013	-24
277	135	-10	-10	-30.96910013	-24
278	136	-10	-10	-30.96910013	-24
279	137	-10	-10	-30.96910013	-24
280	138	-10	-10	-30.96910013	-24
281	139	-10	-10	-30.96910013	-24
282	140	-10	-10	-30.96910013	-24
283	141	-10	-10	-30.96910013	-24
284	142	-10	-10	-30.96910013	-24
285	143	-10	-10	-30.96910013	-24
286	144	-10	-10	-30.96910013	-24
287	145	-10	-10	-30.96910013	-24
288	146	-10	-10	-30.96910013	-24

	A	B	C	D	E
289	147	-10	-10	-30.96910013	-24
290	148	-10	-10	-30.96910013	-24
291	149	-10	-10	-30.96910013	-24
292	150	-10	-10	-30.96910013	-24
293	151	-10	-10	-30.96910013	-24
294	152	-10	-10	-30.96910013	-24
295	153	-10	-10	-30.96910013	-24
296	154	-10	-10	-30.96910013	-24
297	155	-10	-10	-30.96910013	-24
298	156	-10	-10	-30.96910013	-24
299	157	-10	-10	-30.96910013	-24
300	158	-10	-10	-30.96910013	-24
301	159	-10	-10	-30.96910013	-24
302	160	-10	-10	-30.96910013	-24
303	161	-10	-10	-30.96910013	-24
304	162	-10	-10	-30.96910013	-24
305	163	-10	-10	-30.96910013	-24
306	164	-10	-10	-30.96910013	-24
307	165	-10	-10	-30.96910013	-24
308	166	-10	-10	-30.96910013	-24
309	167	-10	-10	-30.96910013	-24
310	168	-10	-10	-30.96910013	-24
311	169	-10	-10	-30.96910013	-24
312	170	-10	-10	-30.96910013	-24
313	171	-10	-10	-30.96910013	-24
314	172	-10	-10	-30.96910013	-24
315	173	-10	-10	-30.96910013	-24
316	174	-10	-10	-30.96910013	-24
317	175	-10	-10	-30.96910013	-24
318	176	-10	-10	-30.96910013	-24
319	177	-10	-10	-30.96910013	-24
320	178	-10	-10	-30.96910013	-24
321	179	-10	-10	-30.96910013	-24
322	180	-10	-10	-30.96910013	-24